

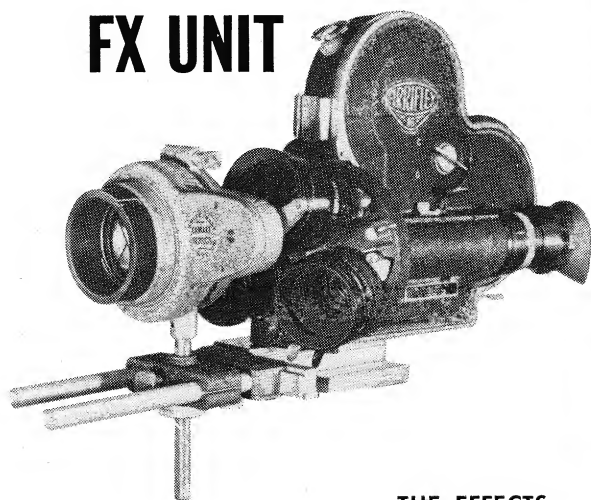
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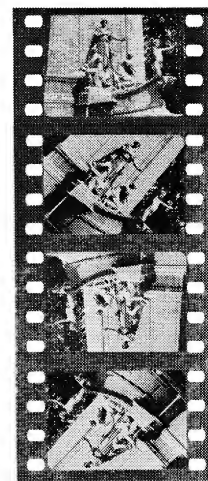
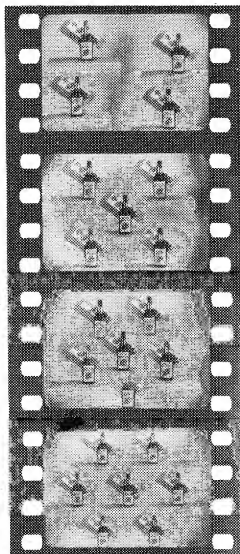
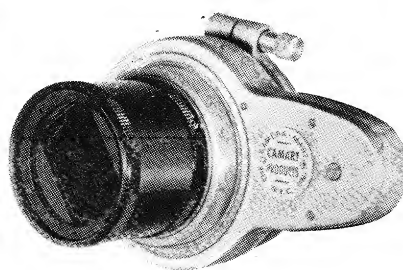
Cinematographer

SEPTEMBER, 1964

CAMART OPTICAL FX UNIT



ROTATOR LENS



THE EFFECTS

Examples of some of the interesting optical effects produced by the Camart Optical FX Unit and Rotator Lens. At right, from top to bottom: 4 images in rotation; 4 images rotate

around a 5th; 5 images rotate around a 6th; and 6 images rotate around a stationary 7th image. At far right: a full-frame image in various stages of rotation, as produced by the Camart Rotator Lens.

Do-It-Yourself Special Effects

Simple lens attachments enable a cameraman to produce a wide variety of optical effects in the camera, 16mm or 35mm.

TIME WAS WHEN the use of special effects in films meant that independent film producers and commercial film makers had to assign this work to specialists outside their organizations, very often at considerable additional expense. Now, unusual optical effects that lend impact to motion pictures and to TV programs and commercials can be achieved by the cinematographer and TV cameraman on-the-job as he shoots, using only simple camera attachments.

Since the inception of motion pictures, special effects have played an important role in bringing new dramatic emphasis to movies. Two of the very first effects were the fade and the lap-dissolve. Later, other effects were devised, many of them made in the camera by the cameraman as the pic-

ture was being shot. Ultimately, the use of special effects became so important to motion picture production that each major Hollywood studio set up its own special effects department. Today, using equipment designed especially for this purpose, effects are made separately from the main production.

A simple and relatively inexpensive device augmented by a newly expanded series of accessories is providing practical answers to many special effects problems for low-budget film producers. Trademarked the Camart Optical FX Unit, and marketed by the Camera Mart, Inc., New York City, the device is readily adaptable for use with most 16mm and 35mm motion picture and television cameras; it will reproduce multiple, identical images in

rotation of a single product or object. The unit is also an ideal accessory for animation cameras used in the production of film commercials. A special rotator lens, integrated with this attachment, will reproduce images upside-down, sideways, or tilted at any angle, or constantly spinning.

As pictured in the illustration, the Camart Optical FX Unit is attached to the camera, and is operated by the cameraman himself while shooting. The unit consists of a base plate and double arm assembly, which fits between tripod head and camera and holds a revolving housing and prism directly in front of the camera lens. The number of images reproduced is dependent upon the number of surfaces on the prism used with the Unit. A

crank, extended from the side of the housing, is operated by the cameraman to set the prisms in motion to produce the desired optical effect. The crank may be turned in either direction and at any speed to rotate images clockwise or counter-clockwise at varying rates of speed. The images may also be photographed in still motion when desired.

Prisms are available in two, three, four, five, six and seven surfaces. Sample effects are illustrated in the film clips reproduced here. The prisms, with surfaces ground to exacting tolerances, will produce from two to seven identical images on a single frame of film. And with some prisms the images can be made to revolve around the central image. Example: the five-surfaced prism will create four images revolving around a center stationary image.

Still other effects possible with this device and using the various prisms include: producing multiple images in a portion of the film frame, with the remaining portion containing a single original object; identical images reproduced in parallel rotation rather than circular motion; elongating the image in one position of the prism (an anamorphic distortion type) and shortening the image in another position, and revolving this prism to produce a crazy-house mirror effect.

Two prisms may be used in combination to produce a kaleidoscopic effect. Another combination will achieve a dissolve from one scene to a multiple

image effect, then dissolve back to the regular scene. An accessory montage unit makes possible filming up to four different scenes on a single frame of film, each occupying a portion (down to 1/4th) of the frame. This is done by masking off a portion of the frame with the montage unit, then exposing the film for the desired length of the scene. The film is then wound back in the camera with the lens capped or shutter closed. With the montage unit rotated to the next portion of the frame, the new scene is filmed, and the sequence is repeated until all sections of the film frame have been exposed.

Producers of commercial films, for example, may use this effects device in a number of ways to add a cinematic fillip to their productions or to obtain eye-arresting effects for TV commercials. The revolving multiple-image effect can be employed to accentuate attention on a sponsor's product. The montage effect can be used to center attention on three or four related activities at one time, where showing them simultaneously on the screen clarifies the steps necessary in a complicated operation. Such treatment is also ideally suited for educational and training films.

Perhaps one of the most interesting effects can now be achieved through the use of the Rotator Lens for the Camart Optical FX Unit. By means of this lens, images reproduced by live TV cameras can be made to appear upside-down or tilted to any desired degree. (This is the only manner by

which this effect can be accomplished in live TV other than by special electronic controls.)

This device is a natural for animation and TV film commercials. Scenes can be rotated a full 360 degrees, and such rotation is possible in both clockwise and counter-clockwise directions. The effect that the live or filmed subject is getting dizzy or blacking out can be accomplished very simply by slowly cranking the handle of the special housing, and gradually increasing the speed until the subject or scene is whirling rapidly, concluding with a fade-out. Or, by cranking the handle gently back and forth, ship-board motion can be simulated.

In order to make the Camart Optical FX Unit more flexible for professional use, Camera Mart has designed a motor drive attachment with a variable speed control. The motor unit is specially constructed to provide smooth and continuous rotation of the FX Unit in either direction.

Obviously the use possibilities of the devices described here are extensive. Now producers of television films and commercials can write special effects into scripts that hitherto have been avoided due to the high cost conventional special effects entailed. Cinematographers and film producers in the New York area may drop in at The Camera Mart at 1845 Broadway for a demonstration of the Camart FX unit. Those outside the area are invited to write to The Camera Mart for full descriptive data. ■

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